

Notice of Allowability

Application No.

09/727,567

Examiner

Kenny Lin

Applicant(s)

BRADLEY ET AL.

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/27/2005.
2. ☒ The allowed claim(s) is/are 1-2, 4-8, 10-14, 16-21 now renumbered 1-18.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>12/21/2005</u> . |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>9/22/2005</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |


JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

DETAILED ACTION

1. Claims 1-2, 4-8, 10-14, 16-21 are presented for examination.
2. The IDS submitted on 9/22/2005 has been considered by the examiner.
3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Stoycho Draganoff on 12/21/2005.

4. The application has been amended as follows:
 1. (Currently Amended) A method for monitoring a level of network service provided by a service provider, the method comprising the computer-implemented steps of:
receiving a schema that provides a configuration for monitoring a service level contract between the service provider and a particular customer, wherein the schema comprises:
data defining one or more metric tests for monitoring the level of network service being provided to the particular customer by the service provider, each said metric test measuring a level of service of a particular type of network operation, and including a set of one or

more threshold values that correspond to ~~a range of acceptable performance~~ one or more particular performance metrics for the particular type of network operation, and
information defining a specific time range for when the one or more metric tests are to be performed; and
distributing the one or more metric tests to one or more agents, wherein the one or more agents configure devices associated with the network to automatically perform the one or more metric tests during the specific time range, and receive result information from the devices performing the one or more metric tests[.], wherein each of the one or more metric tests is selected from the group consisting of ICMP metric test, UDP metric test, DNS metric test, HTTP metric test and VoIP metric test.

7. (Currently Amended) A computer readable storage medium carrying sequences of instructions for monitoring a level of network service provided by a service provider, the sequences of instructions including instructions for performing the steps of:
receiving a schema that provides a configuration for monitoring a service level contract between the service provider and a particular customer, wherein the schema comprises:
data defining one or more metric tests for monitoring the level of network service being provided to the particular customer by the service

provider, each said metric test measuring a level of service of a particular type of network operation, and including a set of one or more threshold values that define ~~a range of acceptable values~~ one or more particular performance metrics for the particular type of network operation, and

information defining a specific time range for when the one or more metric tests are to be performed; and

distributing the one or more metric tests to one or more agents, wherein the one or more agents configure devices associated with the network to perform the one or more metric tests during the specific time range and receive result information from the devices performing the one or more metric tests[.], wherein each of the one or more metric tests is selected from the group consisting of ICMP metric test, UDP metric test, DNS metric test, HTTP metric test and VoIP metric test.

8. (Currently Amended) The computer readable storage medium recited in claim 7,

further comprising instructions for performing the steps of:

for each metric test defined in the schema, determining whether result information for that metric test is within the range of acceptable values defined by the set of one or more threshold values included with that metric test; and

creating and storing reporting information that indicates whether the customer is actually receiving, during the specific time range, the level of network

service offered by the service provider in the service level contract, said reporting information based on said determinations.

10. (Currently Amended) The computer readable storage medium recited in claim 7, said schema being based on Extensible Markup Language (XML), and wherein the schema models the service level contract.

11. (Currently Amended) The computer readable storage medium recited in claim 7, further comprising instructions for performing the steps of:

generating, at a server, interface data for defining the schema for monitoring the service level contract; and

communicating the interface data to a client that is remote from said server, wherein the interface data allows users to configure specific times for monitoring the level of service that is being provided by the service provider, and to configure the set of one or more threshold values associated with each metric test.

12. (Currently Amended) The computer readable storage medium recited in claim 7, wherein: the one or more agents configure the devices to perform the one or more metric tests only within the specific time range.

13. (Currently Amended) A network device configured for monitoring a level of network service provided by a service provider, comprising:
- a network interface;
 - a processor coupled to the network interface and receiving information from the network interface;
 - a computer-readable medium accessible by the processor and comprising one or more sequences of instructions which, when executed by the processor, cause the processor to carry out the steps of:
 - receiving a schema that provides a configuration for monitoring a service level contract between the service provider and a particular customer, wherein the schema comprises:
 - data defining one or more metric tests for monitoring the level of network service being provided to the particular customer by the service provider, each said metric test measuring a level of service of a particular type of network operation, and including a set of one or more threshold values that define ~~a range of acceptable values~~ one or more particular performance metrics for the particular type of network operation, and
 - information defining a specific time range for when the one or more metric tests are to be performed; and

distributing the one or more metric tests to one or more agents, wherein the one or more agents configure devices associated with the network to perform the one or more metric tests during the specific time range and receive result information from the devices performing the one or more metric tests[[]], wherein each of the one or more metric tests is selected from the group consisting of ICMP metric test, UDP metric test, DNS metric test, HTTP metric test and VoIP metric test.

19. (Currently Amended) A network device configured for monitoring a level of network service provided by a service provider, comprising:
- means for receiving a schema that provides a configuration for monitoring a service level contract between the service provider and a particular customer, wherein the schema comprises:
- data defining one or more metric tests for monitoring the level of network service being provided to the particular customer by the service provider, each said metric test measuring a level of service of a particular type of network operations, and including a set of one or more threshold values included with each of the one or more metric tests that define one or more particular performance metrics for the particular type of network operation, and

information defining a specific time range for when the one or more metric tests are to be performed; and

means for distributing the one or more metric tests to one or more agents, wherein the one or more agents configure devices associated with the network to perform the one or more metric tests during the specific time range and receive result information from the devices performing the one or more metric tests[.],
wherein each of the one or more metric tests is selected from the group consisting of ICMP metric test, UDP metric test, DNS metric test, HTTP metric test and VoIP metric test.

5. Claims 1-2, 4-8, 10-14, 16-21 are allowed.

6. The following is an examiner's statement of reasons for allowance: None of the prior art of record fairly suggests or teaches all of the claimed limitations especially the limitations of using a schema that comprises data defining metric tests for monitoring the level of network service and information defining a specific time range for when the one or more metric tests are to be performed to provide a configuration for monitoring a service level contract between the service provider and a particular customer, wherein said metric test is selected from the group consisting of ICMP metric test, UDP metric test, DNS metric test, HTTP metric test and VoIP metric test. Furthermore, none of the prior art of record suggested to distribute the ICMP, UDP, DNS, HTTP or VoIP metric tests to agents to have the agents configure devices associated with

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the network to automatically perform the tests during a determined specific time range, and receive result information from the devices performing the metric tests.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenny Lin whose telephone number is (571) 272-3968. The examiner can normally be reached on 8 AM to 5 PM Tue.-Fri. and every other Monday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ksl
December 22, 2005



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